

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A fuel cell, comprising:

a pair of membrane electrode assemblies (MEAs) separated from each other by a distance, each MEA having an anode side and a cathode side;

a bipolar plate assembly located between the anode side of one of the pair of MEAs and the cathode side of the other of the pair of MEAs, the bipolar plate assembly having:

a first sub-plate with a flow channel which is open to the anode side of the one of the pair of MEAs and a land region adjacent to said flow channel in said first sub-plate;

a second sub-plate with a flow channel which is open to the cathode side of the other of the pair of MEAs and a land region adjacent to said flow channel in said second sub-plate, the first sub-plate and the second sub-plate being nested together to form a coolant flow channel between the first and second sub-plates, one of said land region adjacent to said flow channel in said first sub-plate and said land region adjacent to said flow channel in said second sub-plate having a width substantially greater than a width of said flow channel in the other of said first sub-plate and said second sub-plate.

2. (original) A fuel cell according to Claim 1, wherein the flow channel of the first sub-plate and the flow channel of the second sub-plate are laterally centered with respect to each other to form a plurality of coolant flow channels.

3. (original) A fuel cell according to Claim 2, wherein the flow channels have a surface area and wherein the combined surface area of the plurality of coolant flow channels is greater than the surface area of the flow channel which is open to the cathode side or the surface area of the flow channel which is open to the cathode side.

4. (original) A fuel cell according to Claim 1, wherein the second sub-plate includes a plurality of flow channels open to the cathode side which correspond to the flow channel of the first sub-plate open to the cathode side.

5. (original) A fuel cell according to Claim 1, wherein the coolant flow path has a height dimension which is substantially within a height dimension of the cathode flow path, the anode flow path or both.

6. (original) A fuel cell according to Claim 1, wherein at least one of the flow channel which is open to the anode side or the flow channel which is open to the cathode side, or both provide a serpentine flow path.

7 – 20 (cancelled).

21. (previously presented) A fuel cell according to Claim 1, wherein one of said land region in said first sub-plate and said land region in said second sub-plate has a width at least twice as large as a width of said flow channel of the other of said first sub-plate and said second sub-plate.

22. (currently amended) A fuel cell according to Claim 21, wherein one of said land region in said first sub-plate and said land region in said second sub-plate has a width ~~at least~~ generally three times as large as a width of said flow channel of the other of said first sub-plate and said second sub-plate.

23. (previously presented) A fuel cell according to Claim 21, wherein one of said land region in said first sub-plate and said land region in said second sub-plate has a width at least twice as large as a width of said flow channel of the other of said first sub-plate and said second sub-plate and is adapted to house at least two coolant channels therein.

24. (previously presented) A fuel cell according to Claim 1, wherein said land region of said first sub-plate has a width generally equal to a width of said land region of said second sub-plate.

25. (previously presented) A fuel cell according to Claim 1, wherein said flow channel and said adjacent land region in said first sub-plate has a cross section similar to a cross section of said flow channel and said adjacent land region in said second sub-plate.

26. (previously presented) A fuel cell according to Claim 1, wherein said land region of said first sub-plate has a width generally greater than a width of said flow channel in said first sub-plate and said land region of said second sub-plate has a width generally greater than a width of said flow channel in said second sub-plate.

27. (previously presented) A fuel cell according to Claim 1, wherein at least one of said first sub-plate and second sub-plate abuts said land region of the other of said first sub-plate and second sub-plate.

28. (previously presented) A fuel cell according to Claim 1, further comprising a first wall extending from said land region on said first sub-plate and a second wall extending from said land region on said second sub-plate, said first and second walls generally abutting one another.

29. (previously presented) A fuel cell according to Claim 1, wherein said land region of said first sub-plate has a width substantially greater than said land region of said second sub-plate.

30. (previously presented) A fuel cell according to Claim 1, wherein said flow channel of said first sub-plate is disposed against a land region of said second sub-plate and a flow channel of said second sub-plate is disposed against a land region of said first sub-plate.